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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/524,491	03/13/2000	Francis J Maguire JR.	313-011-1	6120
4955	7590	08/23/2004	EXAMINER	
WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP BRADFORD GREEN BUILDING 5 755 MAIN STREET, P O BOX 224 MONROE, CT 06468			SHAPIRO, LEONID	
			ART UNIT	PAPER NUMBER
			2673	19

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/524,491

Applicant(s)

MAGUIRE, FRANCIS J

Examiner

Leonid Shapiro

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 18.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

1. In view of the Appeal brief filed on 09-15-03, PROSECUTION IS HEREBY REOPENED. Terms set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 6, 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Watkins (US Patent No. 6,201,568 B1) in view of Iwamoto (US Patent No. 5,751,259).

As to claim 1, Watkins teaches apparatus, comprising: a support for supporting a user in a seated, or reclining position (See Fig. 5, items 92, 100, Col. 4, Lines 35-41); and a movable headrest on or with respect to support, for supporting a

head of user, wherein the headrest comprises side cushions (in reference concave recess), or both rear and side cushions, for providing the only points of contact between the user's head and the headrest (See Fig. 5, items 92, 100, Col. 4, Lines 35-41).

Watkins does not show a head of user in executing head movements to view images from changing directions.

Iwamoto teaches a head of user in executing head movements to view images from changing directions in seated or standing positions (See Fig. 6, items 1, 28-29, Col. 4, Lines 53-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate teaching of Iwamoto into the Watkins system in order the user to be able to view the image in any desired location (See Col. 5, Lines 18-20 in Iwamoto reference).

As to claims 2, 6 Iwamoto teaches a display and sensor for providing images for viewing from changing direction (See Fig. 6, items 1, 28-29, Col. 4, Lines 53-67).

As to claim 10, Watkins teaches apparatus, comprising: a headrest and a support for supporting a user in a reclining posture with a head of user resting on headrest mounted on or with respect to support (See Fig. 5, items 92, 100, Col. 4, Lines 35-41); headrest with movable headrest for supporting head of the user in executing head movements in a changing of head of user (See Fig. 5, items 92, 100, Col. 4, Lines 35-41), head and headrest moving together in changing direction with respect to support (See Fig. 5, items 92, 100, Col. 4, Lines 35-41).

Watkins does not show a viewing images provided from a correspondingly changing direction of view.

Iwamoto teaches a viewing images provided from a correspondingly changing direction of view (See Fig. 6, items 1, 28-29, Col. 4, Lines 53-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate teaching of Iwamoto into the Watkins system in order the user to be able to view the image in any desired location (See Col. 5, Lines 18-20 in Iwamoto reference).

3. Claim 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Stoeckl (US Patent No. 5,203,609) in view of Reichlen (US Patent No. 6,396,497 B1).

Stoeckl teaches apparatus comprising: a sensor coupled to a moveable headrest for supporting a user's head, for providing a sensed signal (See Figs. 1-2, items 5, G1-G4, Col. 7, Lines 7-23).

Stoeckl does not teach a sensor coupled to a moveable headrest responsive to head movements of the user, for providing a sensed signal having a magnitude indicative of different directions-of-view, corresponding to head movemenrs; a reality engine responsive to a sensed signal, for providing an image signal indicative of a sequence of images from different directions-of-view selected according to sensed signal and a display, responsive to image signal, for providing sequence of images for viewing by user from different directions-of-view.

Reichlen teaches apparatus with reality engine (computer) with sensor attached to the user's head, responsive to sensed signal, for providing an image signal indicative of a sequence of images from different directions-of-view selected according to sensed signal (See Fig. 1-5, item 24, 34, 36, 42, 56, 62, 50, in description See Col. 5, Lines 33-67 and Col. 6 and 7) and a display, responsive to image signal, for providing sequence of images for viewing by user from different directions-of-view (See fig. 2, items 34, 40, Col. 5, Lines 46-55).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the navigation method of Reichen in the Stoecki apparatus in order to perform certain computer functions without requiring use of keyboard or mouse (See Col. 2, lines 49-52 in Reichlen reference).

4. Claims 3-5, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watkins, Iwamoto as aforementioned in claims 1,2 in view of Zwolinski et al. (US Patent No. 5,673,059)

As to claim 3-5, 7 Watkins and Iwamoto do not teach an actuator and sensor for moving moveable headrest.

Zwolinski et al. teaches an actuator and sensor for moving moveable headrest (See Fig. 1, items 54, 56, Col. 5, Lines 33-47).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the actuator of Zwolinski et al. in Watkins and Iwamoto apparatus in order to widen the range of applications.

5. Claims 9 rejected under 35 U.S.C. 103(a) as being unpatentable over Reichlen in view of Watkins and further in view of Zwolinski et al.

Reichlen teaches apparatus with a reality engine (computer), responsive to a start command signal, for providing an image signal indicative of a sequence of images from different directions-of-view and providing a display, responsive to image signal and display, for providing sequence of images for viewing by the user from different directions-of-view (See Fig. 1-5, item 24, 34, 36, 42, 56, 62, 50, in description See Col. 5, Lines 33-67 and Col. 6 and 7).

Reichlen has failed to teach headrest, however Watkins teaches a moveable headrest, attached to support (See Fig. 2, items 14,30,28, in description See Col. 7, Lines 50-66).

Reichlen and Watkins do not teach an actuator, responsive to actuator command signal, for moving a headrest supporting a user's head with movements corresponding to different directions-of-view.

Zwolinski et al. teaches an actuator for moving moveable headrest (See Fig. 1, items 54, 56, Col. 5, Lines 33-47).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the headrest of Watkins and actuator of Zwolinski et al. in Reichen apparatus in order to adjust the seat to assure the proper interaction with other systems (See Col. 1, lines 44-49 in Zwolinski et al. reference).

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watkins and Iwamoto as applied to claim 10 above, and further in view of Zwolinski et al.

Iwamoto and Watkins do not teach an actuator connected to movable headrest for moving movable headrest with respect to support for changing direction of head of user in executing head movements with respect to support.

Zwolinski et al. teaches an actuator for moving moveable headrest (See Fig. 1, items 54, 56, Col. 5, Lines 33-47).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate teaching of Zwolinski into Iwamoto and Watkins system in order to adjust the seat to assure the proper interaction with other systems (See Col. 1, lines 44-49 in Zwolinski et al. reference).

7. Claim 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watkins, Zwolinski et al. and Iwamoto as applied to claim 11 above, and further in view of Reichen.

As to claim 12, Zwolinski et al. teaches an actuator responsive to a command signal for moving movable headrest (See Fig. 1, items 54, 56, Col. 5, Lines 33-47).

Watkins, Zwolinski et al. and Iwamoto do not teach reality engine.

Reichlen teaches apparatus with a reality engine (computer), responsive to a start command signal, for providing an image signal indicative of a sequence of images from different directions-of-view and providing a display, responsive to image signal and display, for providing sequence of images for viewing by the user from different

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directions-of-view (See Fig. 1-5, item 24, 34, 36, 42, 56, 62, 50, in description See Col. 5, Lines 33-67 and Col. 6 and 7).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate teaching of Reichlen into Iwamoto, Zwolinski and Watkins system in order to perform certain computer functions (See Col. 2, lines 49-52 in Reichlen reference).

As to claim 13, Iwamoto teaches a sensor for sensing movements of movable headrest (in the reference sensor attached indirectly to the user head) for providing a sensed signal (See Fig. 6, item 29, Col. 4, Lines 53-68).

Response to Amendment

8. Applicant's arguments filed on 06-03-03 with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Telephone inquire

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 703-305-5661. The examiner can normally be reached on 8 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703-305-4938. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ls 08.17.04

A handwritten signature in black ink, appearing to read 'Vijay Shankar', with a stylized, cursive script.

**VIJAY SHANKAR
PRIMARY EXAMINER**